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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,169	07/11/2003	Richard Armstrong	CAS1.PAU.28	4366

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MYERS DAWES ANDRAS & SHERMAN, LLP
19900 MACARTHUR BLVD.,
SUITE 1150
IRVINE, CA 92612

EXAMINER

NGUYEN, SANG H

ART UNIT PAPER NUMBER

2877

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/618,169	ARMSTRONG, RICHARD	
	Examiner	Art Unit	
	Sang Nguyen	2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,10,13 and 14 is/are rejected.
- 7) ☒ Claim(s) 3-9,11,12 and 15-23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 1 is objected to because of the following informalities:

Claim 1 recites the limitation "sends a sensor return signal" in lines 9-10. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 10, 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kirkpatrick (U. S. Patent No. 4,905,581) in view of Staples et al (6,050,148).

Regarding claim 1; Kirkpatrick teaches a single sensor actuation system for a driven belt of a tortilla press, comprising:

a signal emitting and retrieving sensor (36 of figure 7 and col.3 lines 64-68) for producing an emitted signal;

an AC inverter, the sensor connected to the inverter;

at least one detectable element considered to be a doughball workpiece (27 of figure 5) on the belt (16, 29 of figure 7) and sensed by the sensor (36 of figure 7) when

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said detectable element is aligned with the emitted signal of the sensor (36 of figure 7);

and

a platen considered to be a movable plate (24 of figure 7) and a fixed plate (22 of figure 7) of a press unit (14 of figure 7) for pressing tortillas on the belt (16, 29 of figure 7), wherein the sensor (36 of figure 7) for retrieving a reflected signal (figure 1 and col.3 lines 64-68) from said detectable element (27 of figure 7) and sends return signal of the sensor to a motor driving the belt (55 of figure 7 and col.4 lines 20-32) of a processing control system (43 of figure 8) to stop the belt (29 of figure 7) in response to the retrieving when the at least one detectable element (27 of figure 5) is aligned with the emitted signal of the sensor (36 of figure 7), and wherein the processing control system (43 of figure 8) sends a signal to a switch actuator (50, 52 of figure 7) of the platen (24 of figure 7) of the press unit (14 of figure 7) to bring the platen down to press a tortilla when the belt has stopped (col.4 line 10 to col.6 line 65). Figures 1-8.

Kirkpatrick teaches all of features of claimed invention except for the sensor connected to an AC inverter. However, Staple et al teaches that it is known in the art to provide an apparatus (10 of figure 1) having an a programmable logic controller (86 of figure 10) is coupled to AC inverter (100 of figure 10) and a proximity sensor (102 of figure 10 and col.5 line 44 to col.6 line 2). See figures 1-10.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine Kirkpatrick's a method and a single sensor actuation system for a driven belt of a tortilla press with the sensor connected to an AC

inverter as taught by Staple et al for the purpose of controlling various speed into revolutions per minute of shaft.

Regarding claims 2 and 14; Kirkpatrick teaches the processing control system (43 of figure 8) includes a switch (55 of figure 7) contacts to conveyor drive motor (30 of figure 7), and the motor (30 of figure 7) has a lead connecting the motor to the processing control system (43 of figure 8) so that the switch closes when the motor goes to 0 Hz (col.5 lines 3-45).

Regarding claim 10; Kirkpatrick teaches the belt is a flexible belt (16 of figure 7) surrounding at least one roller (30, 32 of figure 7), and wherein the sensor (36 of figure 7) is positioned juxtaposed to said at least one roller (30 of figure 7).

Regarding claim 13; Kirkpatrick teaches a method of actuating a second part of a tortilla machine in response to a detected position of a first part of the machine, comprising:

detecting a first position (28 of figure 1) of said first part of the machine considered to be a movable plate (24 of figure 2) of ram (26 of figure 2) to close a piece work (27 of figure 2) by a sensor (36 of figure 2), wherein the first part has the piece work (27 of figure 2);

sending a signal from the sensor (36 of figure 2) to a processing system (43 of figure 8) when the first position is detected by the sensor (36 of figure 2);

slowing the first part of the machine (24, 26 of figure 3) by a signal from the processing control system (43 of figure 8) to a drive (50, 52 of figure 7) of the first part;

stopping the first part of the machine by a limit switch (50, 52 of figure 7) contact to an emergency stop (60 of figure 8) and a stop cycle (58 of figure 8 of the processing control system (43 of figure 8) at a predetermined second position different from the first position (figures 2-3); and

actuating the second part of the machine (16 of figure 7) by a conveyor drive roller (30 of figure 7) with a switch (55 of figure 7) when a signal from the drive of the first part of the machine goes to a zero frequency (col.4 line 12 to col.6 line 65). See figures 1-8.

Kirkpatrick teaches all of features of claimed invention except for the sensor connected to an AC inverter. However, Staple et al teaches that it is known in the art to provide an apparatus (10 of figure 1) having an a programmable logic controller (86 of figure 10) is coupled to AC inverter (100 of figure 10) and a proximity sensor (102 of figure 10 and col.5 line 44 to col.6 line 2). See figures 1-10.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine Kirkpatrick's a method and a single sensor actuation system for a driven belt of a tortilla press with the sensor connected to an AC inverter as taught by Staple et al for the purpose of controlling various speed into revolutions per minute of shaft.

Allowable Subject Matter

Claims 3-9, 11-12, and 15-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record, taken alone or in combination, fails discloses or render obvious a single sensor actuation system for a driven belt of a tortilla press comprising all the specific elements with the specific combination including of the inverter and an associated Programmable Logic Controller (PLC) receive the sensor return signal from the sensor when a detectable element is detected by the sensor, and wherein the inverter stops the motor through a pre-programmed vector curve that is provided as an integral pad of the inverter so that the belt moves a set distance past the point at which the retrieved signal was received by the inverter so that the belt travel after a retrieved stop signal is the same independent of the belt's original speed in set forth limitation of claim 3.

The prior art of record, taken alone or in combination, fails discloses or render obvious a single sensor actuation system for a driven belt of a tortilla press comprising all the specific elements with the specific combination including of the sensor is a fiber optic light sensor with capabilities of sensing multiple shades of color from the detectable element, and wherein the detectable element is a colored mark of a predetermined range of shades and color on the belt in set forth limitation of claim 11.

The prior art of record, taken alone or in combination, fails discloses or render obvious a single sensor actuation system for a driven belt of a tortilla press comprising all the specific elements with the specific combination including of the sensor is directly

connected to a terminal block in the AC inverter and sends a sensor return signal to the motor to stop the belt in response to said retrieving when the at least one detectable element is aligned with the emitted signal of the sensor in set forth limitation of claim 12.

The prior art of record, taken alone or in combination, fails discloses or render obvious a method of actuating a second part of a tortilla machine in response to detected position of a first part of the machine comprising all the specific elements with the specific combination including of the first part has a detectable element and the machine has a sensor for detecting the detectable element, the method further comprising: detecting the position of the first part by sensing the detectable element on the first part by the sensor, and retrieving a returned signal from the detectable element and sending said returned signal to the inverter in set forth limitation of claim 15.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Karner (6558720) discloses method for automatically sizing and positioning filling material; Goranson (6157014) discloses product-based microwave power level controller; Longoria et al (6053695) discloses tortllia counter stacker; Pant et al (5762536) discloses sensor for a linear polisher; Patel (5630358) discloses countertop appliance for making disc-shape edibles; Lawrence et al (5231919) discloses conveyor belt for dough ball pressing apparatus; Rubio et al (4938126) tortllia press apparatus; or Suzuki et al (4874264) discloses selective magnetic attachment of a print head to a drive belt.

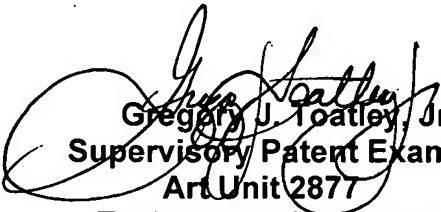
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sang Nguyen whose telephone number is (571) 272-2425. The examiner can normally be reached on 9:30 am to 7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SN
Patent Examiner
Sang nguyen
Art Unit 2877
September 2, 2005


Gregory J. Toatley, Jr.
Supervisory Patent Examiner
Art Unit 2877
Technology Center 2800
